

# Work Order ID 63146

Thursday, October 21, 2010 2:36:38 PM

Page 1

Item ID: D3927-3

Revision ID:

Item Name: Guard

Start Date: 10/22/2010 Start Qty: 1.00

Required Date: 10/29/2010 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: MF Date: 10-10-21 Tooling:

QC: Date: SPC (Y/N):

Cust Item ID:

Customer:

Setup Start

Stop

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3927	B

100



Bandsaw

Jeaspa Bandsaw

Memo

Cut MAT 12" x 12" Long

0.00

0.00

110



HAAS 1

HAAS CNC vertical machine #1

Memo

HAAS

0.00

0.00

1-Mill as per folio FA & dwg D,

FOLIO REV: 3

DWG REV: 13

2-Deburr as required

4 gals  
MF 10-10-21 Accept

16.960" gals  
10-11-02

B.A 10/11/02

SA 10/11/09

4 0

4 3

NIO



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3922-3 PAR #:          Fault Category: Eng-drawing NCR: Yes No DQA:          Date: 10/10/09  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed:          Date: 10/14/10

NCR: <u>63146</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>10/11/09</u>	<u>110</u>	<u>1 part scrap - engineering drawing change</u>	<u>[Signature]</u>	<u>scrap &amp; replace Qty. 1 batch M1160H</u>	<u>S.A 10/11/09</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>10/11/09</u>
<u>10/11/09</u>	<u>110</u>	<u>2 part scrap. R.e. Program error</u>	<u>[Signature]</u>	<u>scrap &amp; replace Qty 2 batch M1160H</u>	<u>[Signature] 10/11/09</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>10/11/09</u>

NOTE: Date & initial all entries



**Work Order ID 63146**

Thursday, October 21, 2010 2:36:38 PM

Page 2

Item ID: D3927-3

Accept

Revision ID:

Item Name: Guard

Start Date: 10/22/2010 Start Qty: 7.00

Required Date: 10/29/2010 Req'd Qty: 7.00

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_

Cust Item ID:

Customer:

Run Start

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Memo

0.00

Quality Control

SA 10/11/09

4

130

QC8- Inspect parts - second check

0.00

QC

Memo

0.00

Quality Control

R 10.11.9

4

140

Identify as per dwg &amp; Stock Location: 149

0.00

Packaging

Memo

0.00

Packaging

R 10/11/10 (y)



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**Work Order ID 63146**

Thursday, October 21, 2010 2:36:38 PM

Page 3

Item ID: D3927-3

Accept

Revision ID:

Item Name: Guard

Start Date: 10/22/2010 Start Qty: 7.00

Required Date: 10/29/2010 Req'd Qty: 7.00

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

150

QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

Cust Item ID:

Customer:

Setup Start

Stop

Run Start

Stop

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

CK 10/11/10

ME

10-11-10



**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Thursday, October 21, 2010 2:36:37 PM

Page 1

Work Order ID: 63146



Parent Item: D3927-3



Parent Item Name: Guard

Start Date: 10/22/2010

Required Date: 10/29/2010

Start Qty: 7.00

Required Qty: 7.00

Comments: IPP RevA: New issue DD verified by:EC  
10.10.21 as per revB DD verified by:

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MDELRLNB2.000X02.0 00		Purchased	No			100	f	14.0000	1.68	12.37895			



DELRIN BAR

Location	Loc Qty	Loc Code
MAT	14	
111828	6	
→115685	8	

M116014

5.1660<sup>ft</sup> B.A 10/11/02

4.3 ft S.A 10/11/09

\* 15 inches left of bar kept for tooling



**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

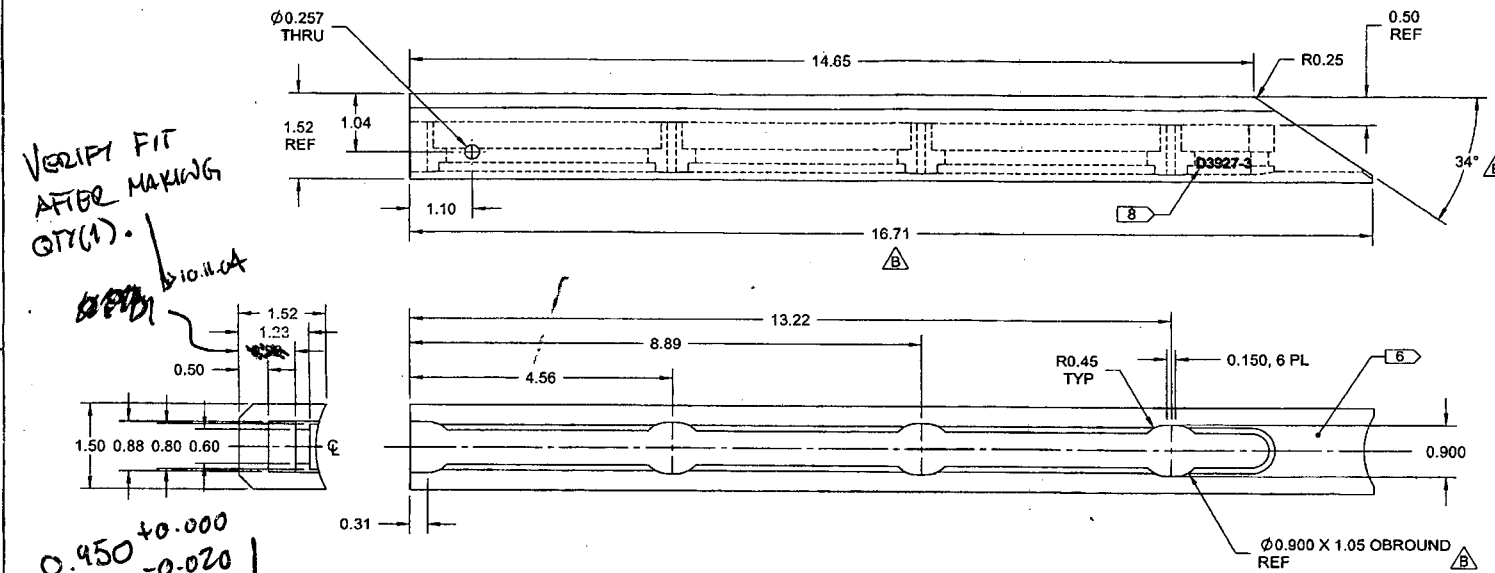
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





**D3927-3 GUARD**

**NOTES:**

- 1) MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL 1.5 THICK  
PER DART SPEC M-DELRIN-S1.5
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH B/N PER QSI 044 6.1 (FINE POINT PERMANENT INK MARKER)
- 7) WEIGHT: 0.74 lbs
- 8) ENGRAVE "D3927-3" TO DEPTH OF 0.005 WITH TOOL TIP RAD OF 0.015  $\pm 0.005$  IN LOCATION INDICATED

DESIGN		<b>DART AEROSPACE USA, INC.</b>	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3927	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		GUARD	NTS
DATE	10.08.22	<small>COPYRIGHT © 2009 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

**RELEASED**  
2010-09-15



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DART AEROSPACE LTD		Work Order: 63146
Description: Gnu'd		Part Number: N3927-3
Inspection Dwg: N3927 Rev: R		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø.257	+0.006 -0.001	Ø.258	/		Ueln	SA-9
1.52 ref	±0.030	1.510	/			
1.04	±0.030	1.054	/			
1.10	±0.030	1.099	/			
16.71	±0.030	16.70	/		Tape	SA-1
34°	±.5°	34°	/		Pistol/Adol	N/A
1.52	±0.030	1.510	/		Ueln	SA-9
1.23	±0.030	1.220	/			
.50	±0.030	.495	/			
.950	±0.020	.942	/			
1.50	±0.030	1.503	/			
.98	±0.030	.900	/			
.80	±0.030	.801	/			
.60	±0.030	.596	/			
.900	±0.010	.800	/			
25x45°	±0.030	25x45°	/			

Measured by: SA
Date: 10/11/09

Audited by: [Signature]
Date: 10-11-9

Preliminary Approval:
Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15